

10/709,436

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\*\*\* YOU HAVE NEW MAIL \*\*\*

=> s polymerase chain reaction and sequencing  
L1 114221 POLYMERASE CHAIN REACTION AND SEQUENCING

=> s l1 and nucleotide(4a) label  
L2 833 L1 AND NUCLEOTIDE(4A) LABEL

=> s l2 and free (2a) 3 (2a) hydroxyl  
L3 30 L2 AND FREE (2A) 3 (2A) HYDROXYL

=> dup rem l3  
PROCESSING COMPLETED FOR L3  
L4 30 DUP REM L3 (0 DUPLICATES REMOVED)

=> s l4 and (support or substrate)  
L5 28 L4 AND (SUPPORT OR SUBSTRATE)

=> d l5 bib abs 1-28

L5 ANSWER 1 OF 28 USPATFULL on STN  
AN 2007:147528 USPATFULL  
TI Method of preparing libraries of template polynucleotides  
IN Gormley, Niall Anthony, Nr. Saffron Waldon, UNITED KINGDOM  
Smith, Geoffrey Paul, Nr. Saffron Waldon, UNITED KINGDOM  
Bentley, David, Nr. Saffron Waldon, UNITED KINGDOM  
Rigatti, Roberto, Nr. Saffron Waldon, UNITED KINGDOM  
PI US 2007128624 A1 20070607  
AI US 2006-486953 A1 20060714 (11)  
PRAI GB 2005-22310 20051101  
DT Utility  
FS APPLICATION  
LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 2068  
AB The present invention relates to a method for preparing a library of

template polynucleotides and use thereof in methods of solid-phase nucleic acid amplification. More specifically, the invention relates to a method for preparing a library of template polynucleotides that have common sequences at their 5' ends and at their 3' ends.

L5 ANSWER 2 OF 28 USPATFULL on STN  
AN 2007:55807 USPATFULL  
TI Mutant polymerases for sequencing and genotyping  
IN Williams, John G.K., Lincoln, NE, UNITED STATES  
Anderson, Jon P., Lincoln, NE, UNITED STATES  
Urlacher, Teresa M., Wahoo, NE, UNITED STATES  
Steffens, David L., Lincoln, NE, UNITED STATES  
PA LI-COR, INC., Lincoln, NE, UNITED STATES (U.S. corporation)  
PI US 2007048748 A1 20070301  
AI US 2005-234677 A1 20050923 (11)  
PRAI US 2004-626552P 20041110 (60)  
US 2004-613560P 20040924 (60)  
DT Utility  
FS APPLICATION  
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH  
FLOOR, SAN FRANCISCO, CA, 94111-3834, US  
CLMN Number of Claims: 72  
ECL Exemplary Claim: 1  
DRWN 13 Drawing Page(s)  
LN.CNT 1823  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention relates to the discovery of novel mutant DNA polymerases that possess altered kinetics for incorporating phosphate-labeled nucleotides during polymerization. The invention further relates to the use of these mutant DNA polymerases in sequencing and genotyping methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 28 USPATFULL on STN  
AN 2006:281499 USPATFULL  
TI Modified polymerases for improved incorporation of nucleotide analogues  
IN Smith, Geoffrey Paul, Essex, UNITED KINGDOM  
Bailey, David Mark Dunstan, Essex, UNITED KINGDOM  
Sanches, Raquel Maria, Essex, UNITED KINGDOM  
Swerdlow, Harold, Essex, UNITED KINGDOM  
Earnshaw, David James, Essex, UNITED KINGDOM  
PI US 2006240439 A1 20061026  
AI US 2004-571706 A1 20040910 (10)  
WO 2004-GB3891 20040910  
20060608 PCT 371 date  
PRAI GB 2003-21306 20030911  
DT Utility  
FS APPLICATION  
LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601, US  
CLMN Number of Claims: 66  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 4088  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention relates to modified polymerase enzymes which exhibit improved incorporation of nucleotide analogues bearing substituents at the 3' position of the sugar moiety that are larger in size than the naturally occurring 3' hydroxyl group. Also described are methods of using the polymerases to incorporate nucleotides into polynucleotides, particularly in the context of DNA sequencing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 28 USPATFULL on STN  
AN 2006:46812 USPATFULL  
TI Methods of manipulating nucleic acids  
IN Xiang, Charlie, Germantown, MD, UNITED STATES  
Brownstein, Michael J., Rockville, MD, UNITED STATES  
PA The Gov. of the USA as represented by the Secretary of the Dept. of  
Health & Human Services (U.S. government)  
PI US 2006040283 A1 20060223  
AI US 2005-104737 A1 20050411 (11)  
RLI Continuation-in-part of Ser. No. WO 2003-US33319, filed on 10 Oct 2003,  
PENDING Continuation of Ser. No. US 2002-269515, filed on 11 Oct 2002,  
PENDING Continuation-in-part of Ser. No. WO 2002-US11656, filed on 11  
Apr 2002, PENDING  
PRAI US 2001-283423P 20010411 (60)  
DT Utility  
FS APPLICATION  
LREP KLARQUIST SPARKMAN, LLP, 121 S.W. SALMON STREET, SUITE #1600, ONE WORLD  
TRADE CENTER, PORTLAND, OR, 97204-2988, US  
CLMN Number of Claims: 46  
ECL Exemplary Claim: 1  
DRWN 14 Drawing Page(s)  
LN.CNT 3952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for labeling nucleic acid molecules for use in  
hybridization reactions, and kits employing these methods. The level of  
labeling is increased by including one or more reactive modifications,  
such as amine-modifications, into the primers used to initiate synthesis  
of the nucleic acid molecule, for instance through random-primed reverse  
transcription. Also provided are modified random primers (such as  
amine-modified random primers) useful in these methods, labeling and  
hybridization kits comprising such primers, labeled nucleic acid  
molecules and mixtures of molecules, and methods for using them. Methods  
are also provided for amplifying a nucleic acid template contained  
within extremely small samples, in some cases as little as one cell. In  
particular embodiments, a single random primer is used for all steps of  
the amplification method. The nucleic acid template can either be of  
cellular or viral origin. The disclosure also provides an improved  
method of fixing cells, tissue sections, or laser microdissected  
sections from which RNA can be obtained for subsequent use as RNA  
templates or for generating labeled probe.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 28 USPATFULL on STN  
AN 2005:298944 USPATFULL  
TI Methods and devices for sequencing nucleic acids  
IN Lapidus, Stanley N., Bedford, NH, UNITED STATES  
PI US 2005260609 A1 20051124  
AI US 2004-852028 A1 20040524 (10)  
DT Utility  
FS APPLICATION  
LREP PROSKAUER ROSE LLP, ONE INTERNATIONAL PLACE 14TH FL, BOSTON, MA, 02110,  
US  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Page(s)  
LN.CNT 788

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and devices for high throughput single  
molecule sequencing of a plurality of target nucleic acids  
using a universal primer. Devices of the invention comprise a plurality  
of oligonucleotides, each having the same sequence, bound to a solid  
support, and ligated to a plurality of target nucleic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 28 USPATFULL on STN  
AN 2005:254810 USPATFULL  
TI Modified random primers for probe labeling  
IN Xiang, Charlie, Germantown, MD, UNITED STATES  
Brownstein, Michael J, Rockville, MD, UNITED STATES  
PI US 2005221304 A1 20051006  
AI US 2003-474611 A1 20020411 (10)  
WO 2002-US11656 20020411  
20031009 PCT 371 date  
PRAI US 2001-283423P 20010411 (60)  
DT Utility  
FS APPLICATION  
LREP KLARQUIST SPARKMAN, LLP, 121 S.W. SALMON STREET, SUITE #1600, ONE WORLD  
TRADE CENTER, PORTLAND, OR, 97204-2988, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 2783

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for labeling nucleic acid molecules for use in hybridization reactions, and kits employing these methods. The level of labeling is increased by including one or more reactive modifications, such as amine-modifications, into the primers used to initiate synthesis of the nucleic acid molecule. For instance through random-primed reverse transcription. Also provided are modified random primers (such as amine-modified random primers) useful in these methods, labeling and hybridization kits comprising such primers, labeled nucleic acid molecules and mixtures of molecules, and methods for using them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 28 USPATFULL on STN  
AN 2005:240538 USPATFULL  
TI Methods for analysis of nucleic acid methylation status and methods for fragmentation, labeling and immobilization of nucleic acids  
IN Kurn, Nurith, Palo Alto, CA, UNITED STATES  
Dafforn, Geoffrey A., Los Altos, CA, UNITED STATES  
PI US 2005208538 A1 20050922  
AI US 2004-26280 A1 20041229 (11)  
PRAI US 2003-533381P 20031229 (60)  
DT Utility  
FS APPLICATION  
LREP MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018, US  
CLMN Number of Claims: 24  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Page(s)  
LN.CNT 3352

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods for analysis of nucleic acid methylation status, and fragmentation and/or labeling and/or immobilization of nucleic acids. More particularly, the invention relates to methods for fragmentation and/or labeling and/or immobilization of nucleic acids comprising labeling and/or cleavage and/or immobilization at abasic sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 28 USPATFULL on STN  
AN 2005:62950 USPATFULL  
TI Compositions and methods for analysis of nucleic acids  
IN Makarov, Vladimir L., Ann Arbor, MI, UNITED STATES

Langmore, John P., Ann Arbor, MI, UNITED STATES  
PI US 2005053986 A1 20050310  
AI US 2004-890483 A1 20040713 (10)  
RLI Division of Ser. No. US 2001-801346, filed on 6 Mar 2001, GRANTED, Pat. No. US 6762022 Continuation of Ser. No. US 1998-151236, filed on 10 Sep 1998, GRANTED, Pat. No. US 6197557 Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, ABANDONED  
DT Utility  
FS APPLICATION  
LREP FULBRIGHT & JAWORSKI L.L.P., 600 CONGRESS AVE., SUITE 2400, AUSTIN, TX, 78701  
CLMN Number of Claims: 21  
ECL Exemplary Claim: CLM-1-104  
DRWN 36 Drawing Page(s)  
LN.CNT 5793

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide primer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 28 USPATFULL on STN  
AN 2005:62943 USPATFULL  
TI Combinatorial nucleobase oligomers comprising universal base analogues and methods for making and using same  
IN Livak, Kenneth J., San Jose, CA, UNITED STATES  
Mullah, Khairuzzaman Bashar, Union City, CA, UNITED STATES  
PI US 2005053979 A1 20050310  
AI US 2004-866523 A1 20040610 (10)  
PRAI US 2003-478678P 20030612 (60)  
DT Utility  
FS APPLICATION  
LREP HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025-3506  
CLMN Number of Claims: 76  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 3701

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to insulating combinatorial nucleobase oligomers that comprise universal base analogs, where the oligomers are formed by the ligation of two or more oligomer "blocks" via a covalent linkage. Universal bases may serve to insulate specifically binding nucleobases from the effects of the covalent linker region joining two oligomer blocks together, so that the universal bases at least partially negate the T.sub.m penalty caused by the covalent linkage, effective to reduce the required minimal length of the oligomer blocks and the combinatorial oligomer. The resulting insulating nucleobase combinatorial oligomers find use in any hybridization-based application, including use as probes and primers. The combinatorial oligomers of the present invention provide advantages over existing combinatorial oligomer systems currently known in the art.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 28 USPATFULL on STN  
AN 2004:334806 USPATFULL



TI Binary encoded sequence tags  
 IN Kaufman, Joseph C., Hamden, CT, UNITED STATES  
 Roth, Matthew E., Branford, CT, UNITED STATES  
 Lizardi, Paul M., Wallingford, CT, UNITED STATES  
 Feng, Li, Hamden, CT, UNITED STATES  
 Latimer, Darin R., East Haven, CT, UNITED STATES  
 PA Horlick, Kenneth R. (U.S. corporation)  
 PI US 2004265888 A1 20041230  
 AI US 2004-872984 A1 20040621 (10)  
 RLI Continuation of Ser. No. US 2001-994311, filed on 26 Nov 2001, GRANTED,  
 Pat. No. US 6773886 Continuation of Ser. No. US 2000-637751, filed on 11  
 Aug 2000, GRANTED, Pat. No. US 6383754 Continuation-in-part of Ser. No.  
 US 2000-544713, filed on 6 Apr 2000, GRANTED, Pat. No. US 6261782  
 PRAI US 1999-148870P 19990813 (60)  
 DT Utility  
 FS APPLICATION  
 LREP NEEDLE & ROSENBERG, P.C., SUITE 1000, 999 PEACHTREE STREET, ATLANTA, GA,  
 30309-3915  
 CLMN Number of Claims: 126  
 ECL Exemplary Claim: 1  
 DRWN 3 Drawing Page(s)  
 LN.CNT 3697

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method for the comprehensive analysis of nucleic acid  
 samples and a detector composition for use in the method. The method,  
 referred to as Binary Encoded Sequence Tags (BEST), involves generation  
 of a set of nucleic acid fragments; adding an adaptor to the ends  
 containing recognition site for cleavage at a site offset from the  
 recognition site; cleaving the fragment to generate fragments having a  
 plurality sticky ends; indexing of the fragments into sets based on the  
 sequence of sticky ends. The fragments are indexed by adding a offset  
 adaptor to newly generated ends. A different adaptor will be coupled to  
 each different sticky end. The resulting fragments--which will have  
 defined ends, be of equal lengths (in preferred embodiment), and a  
 central sequence derived from the source nucleic acid molecule--are  
 binary sequence tags. The binary sequence tags can be used and further  
 analyzed in numerous ways. For example, the binary sequence tags can be  
 captured by hybridization and coupling, preferably by ligation, to a  
 probe. The probe is preferably immobilized in an array or on sortable  
 beads. One form of the BEST method, referred to as modification assisted  
 analysis of binary sequence tags (MAABST), assesses modification of  
 sequences in nucleic acid molecules by detecting differential cleavage  
 based on the presence or absence of modification in the molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 28 USPATFULL on STN  
 AN 2003:244266 USPATFULL  
 TI Methods of manipulating nucleic acids  
 IN Xiang, Charlie, Germantown, MD, UNITED STATES  
 Brownstein, Michael J., Rockville, MD, UNITED STATES  
 PA The Gov't of the U.S of America as represented by the Secretary of the  
 Dept. of Health & Human Serv. (U.S. corporation)  
 PI US 2003170675 A1 20030911  
 AI US 2002-269515 A1 20021011 (10)  
 RLI Continuation-in-part of Ser. No. WO 2002-US11656, filed on 11 Apr 2002,  
 PENDING  
 PRAI US 2001-283423P 20010411 (60)  
 DT Utility  
 FS APPLICATION  
 LREP KLARQUIST SPARKMAN, LLP, One World Trade Center, Suite 1600, 121 S.W.  
 Salmon Street, Portland, OR, 97204  
 CLMN Number of Claims: 57  
 ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 3279

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for labeling nucleic acid molecules for use in hybridization reactions, and kits employing these methods. The level of labeling is increased by including one or more reactive modifications, such as amine-modifications, into the primers used to initiate synthesis of the nucleic acid molecule, for instance through random-primed reverse transcription. Also provided are modified random primers (such as amine-modified random primers) useful in these methods, labeling and hybridization kits comprising such primers, labeled nucleic acid molecules and mixtures of molecules, and methods for using them. Methods are also provided for amplifying a nucleic acid template contained within extremely small samples, in some cases as little as one cell. In particular embodiments, a single random primer is used for all steps of the amplification method. The nucleic acid template can either be of cellular or viral origin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 28 USPATFULL on STN

AN 2003:120073 USPATFULL

TI Binary encoded sequence tags

IN Kaufman, Joseph C., Hamden, CT, UNITED STATES

Roth, Matthew E., Branford, CT, UNITED STATES

Lizardi, Paul M., Wallingford, CT, UNITED STATES

Feng, Li, Hamden, CT, UNITED STATES

Latimer, Darin R., East Haven, CT, UNITED STATES

PA Yale University (U.S. corporation)

PI US 2003082556 A1 20030501

US 6773886 B2 20040810

AI US 2001-994311 A1 20011126 (9)

RLI Continuation of Ser. No. US 2000-637751, filed on 11 Aug 2000, PENDING  
Continuation-in-part of Ser. No. US 2000-544713, filed on 6 Apr 2000,  
PATENTED

PRAI US 1999-148870P 19990813 (60)

DT Utility

FS APPLICATION

LREP NEEDLE & ROSENBERG, P.C., Suite 1200, The Candler Building, 127  
Peachtree Street, N.E., Atlanta, GA, 30303-1811

CLMN Number of Claims: 126

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 3686

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method for the comprehensive analysis of nucleic acid samples and a detector composition for use in the method. The method, referred to as Binary Encoded Sequence Tags (BEST), involves generation of a set of nucleic acid fragments; adding an adaptor to the ends containing recognition site for cleavage at a site offset from the recognition site; cleaving the fragment to generate fragments having a plurality sticky ends; indexing of the fragments into sets based on the sequence of sticky ends. The fragments are indexed by adding a offset adaptor to newly generated ends. A different adaptor will be coupled to each different sticky end. The resulting fragments--which will have defined ends, be of equal lengths (in preferred embodiment), and a central sequence derived from the source nucleic acid molecule--are binary sequence tags. The binary sequence tags can be used and further analyzed in numerous ways. For example, the binary sequence tags can be captured by hybridization and coupling, preferably by ligation, to a probe. The probe is preferably immobilized in an array or on sortable beads. One form of the BEST method, referred to as modification assisted analysis of binary sequence tags (MAABST), assesses modification of sequences in nucleic acid molecules by detecting differential cleavage

based on the presence or absence of modification in the molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 28 USPATFULL on STN  
AN 2003:78476 USPATFULL  
TI Enzymatic light amplification  
IN Weiner, Michael P., Guilford, CT, UNITED STATES  
PI US 2003054396 A1 20030320  
AI US 2002-236871 A1 20020906 (10)  
PRAI US 2001-318218P 20010907 (60)  
US 2001-335950P 20011030 (60)  
DT Utility  
FS APPLICATION  
LREP MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL  
CENTER, BOSTON, MA, 02111  
CLMN Number of Claims: 73  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Page(s)  
LN.CNT 3252

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Reversibly labeled nucleotides and methods involving the nucleotides are disclosed. The methods included methods of determining a sequence of a nucleic acid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 14 OF 28 USPATFULL on STN  
AN 2003:23647 USPATFULL  
TI Method for detecting single nucleotide polymorphisms (SNP'S) and point mutations  
IN Xue, Hong, New Territories, HONG KONG  
Wong, Jeffrey Tze-Fei, Mid-Levels, HONG KONG  
PA PharmacoGenetics, Ltd., Clear Water Bay, HONG KONG (non-U.S. corporation)  
PI US 2003017487 A1 20030123  
US 6972174 B2 20051206  
AI US 2002-162530 A1 20020604 (10)  
RLI Continuation-in-part of Ser. No. US 2001-876727, filed on 6 Jun 2001, PENDING  
DT Utility  
FS APPLICATION  
LREP T. Ling Chwang, Suite 600, 2435 N. Central Expressway, Richardson, TX, 75080  
CLMN Number of Claims: 83  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 1562

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of genotyping single nucleotide polymorphisms ("SNP") and point mutations in nucleic acid based on chain extension by polymerase. This invention is based on the fact that the nucleoside immediately 5' adjacent to any SNP/point mutation site is known, and the neighboring sequence immediately 3' adjacent to the site is also known. A primer complementary to the sequence directly adjacent to the SNP on the 3' side in a target polynucleotide is used for chain elongation. The polymerase reaction mixture contains one chain-terminating nucleotide having a base complementary to the nucleotide directly adjacent to the SNP on the 5' side in the target polynucleotide. An additional dNTP may be added to produce a primer with the maximum of a two-base extension. The resultant elongation/termination reaction products are analyzed for the length of chain extension of the primer, or for the amount of label incorporation from a labeled form of the terminator nucleotide.



CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 28 USPATFULL on STN  
AN 2003:17365 USPATFULL  
TI Multiplexed differential displacement for nucleic acid determinations  
IN Singh, Sharat, San Jose, CA, UNITED STATES  
Inamdar, Anita, Sunnyvale, CA, UNITED STATES  
Ullman, Edwin F., Atherton, CA, UNITED STATES  
Cao, Liching, Vallejo, CA, UNITED STATES  
Albagli, David, Millbrae, CA, UNITED STATES  
PA ACLARA BioSciences, Inc. (U.S. corporation)  
PI US 2003013117 A1 20030116  
AI US 2002-245030 A1 20020916 (10)  
RLI Continuation of Ser. No. US 2000-684590, filed on 5 Oct 2000, PENDING  
Continuation-in-part of Ser. No. US 2000-609279, filed on 30 Jun 2000,  
PENDING Continuation-in-part of Ser. No. US 1999-354629, filed on 16 Jul  
1999, PENDING  
DT Utility  
FS APPLICATION  
LREP PERKINS COIE LLP, P.O. BOX 2168, MENLO PARK, CA, 94026  
CLMN Number of Claims: 48  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 1498

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Multiplexed determinations of large numbers of events are achieved in an accurate and simple manner by using a multitude of primer reagents in combination with different capture reagents that serve for sequestering all the reagents at a single site, followed by independent release of subsets of the primer reagents using differential release conditions. Also included as part of the primer reagents may be identifiers, which serve to identify a particular characteristic. The method is illustrated using primers with sequences for initiation of chain extension that are joined to or serve as a capture sequence, and where the extended primer has an identifier. After extending the primer, the extended primers are sequestered via the capture sequence onto a sequestering agent, sequentially released and the released extended primers analyzed to provide multiplexed determinations. The subject method finds application for nucleic acid sequencing, single nucleotide polymorphism determinations, identification of nucleic acid fragments, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 28 USPATFULL on STN  
AN 2002:235372 USPATFULL  
TI Assay for genetic polymorphisms using scattered light detectable labels  
IN Bee, Gary, Vista, CA, UNITED STATES  
Kohne, David E., La Jolla, CA, UNITED STATES  
Korb, Linda, San Diego, CA, UNITED STATES  
Peterson, Todd, Coronado, CA, UNITED STATES  
Yguerabide, Juan, La Jolla, CA, UNITED STATES  
PI US 2002127561 A1 20020912  
AI US 2001-880732 A1 20010612 (9)  
PRAI US 2000-210988P 20000612 (60)  
DT Utility  
FS APPLICATION  
LREP Wesley B. Ames, FOLEY & LARDNER, 23rd Floor, 402 West Broadway, San Diego, CA, 92101-3542  
CLMN Number of Claims: 58  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Page(s)  
LN.CNT 2494

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Described are methods for determining the presence or absence of

particular polymorphisms in CYP2D6 and other genes using scattered light detectable particles as detectable labels, and compositions useful in such methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 28 USPATFULL on STN  
AN 2002:198549 USPATFULL  
TI Fixed address analysis of sequence tags  
IN Lizardi, Paul M., Wallingford, CT, UNITED STATES  
Roth, Matthew E., Branford, CT, UNITED STATES  
Feng, Li, Hamden, CT, UNITED STATES  
Guerra, Cesar E., Guilford, CT, UNITED STATES  
Weber, Shane C., Woodbridge, CT, UNITED STATES  
Kaufman, Joseph C., Hamden, CT, UNITED STATES  
Latimer, Darin R., East Haven, CT, UNITED STATES  
PA Yale University (U.S. corporation)  
PI US 2002106649 A1 20020808  
US 6677121 B2 20040113  
AI US 2001-855793 A1 20010515 (9)  
RLI Continuation of Ser. No. US 2000-544713, filed on 6 Apr 2000, PATENTED  
PRAI US 1999-127932P 19990406 (60)  
DT Utility  
FS APPLICATION  
LREP Robert A. Hodges, NEEDLE & ROSENBERG, P.C., The Candler Building, Suite  
1200, 127 Peachtree Street, N.E., Atlanta, GA, 30303-1811  
CLMN Number of Claims: 154  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 4340

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method for the comprehensive analysis of nucleic acid samples and a detector composition for use in the method. The method, referred to as Fixed Address Analysis of Sequence Tags (FAAST), involves generation of a set of nucleic acid fragments having a variety of sticky end sequences; indexing of the fragments into sets based on the sequence of sticky ends; associating a detector sequence with the fragments; sequence-based capture of the indexed fragments on a detector array; and detection of the fragment labels. Generation of the multiple sticky end sequences is accomplished by incubating the nucleic acid sample with one or more nucleic acid cleaving reagents. The indexed fragments are captured by hybridization and coupling, preferably by ligation, to a probe. The method allows a complex sample of nucleic acid to be quickly and easily cataloged in a reproducible and sequence-specific manner. One form of the method allows determination of associations, in a nucleic acid molecule, of different combinations of known or potential sequences. Another form of the method assesses modification of sequences in nucleic acid molecules by basing cleavage of the molecules on the presence or absence of modification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 18 OF 28 USPATFULL on STN  
AN 2002:102268 USPATFULL  
TI Binary encoded sequence tags  
IN Kaufman, Joseph C., Hamden, CT, United States  
Roth, Matthew E., Branford, CT, United States  
Lizardi, Paul M., Wallingford, CT, United States  
Feng, Li, Hamden, CT, United States  
Latimer, Darin R., East Haven, CT, United States  
PA Yale University, United States (U.S. corporation)  
Agilix Corporation, United States (U.S. corporation)  
PI US 6383754 B1 20020507  
AI US 2000-637751 20000811 (9)

RLI Continuation-in-part of Ser. No. US 2000-544713, filed on 6 Apr 2000,  
now patented, Pat. No. US 6261782  
PRAI US 1999-148870P 19990813 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Horlick, Kenneth R.  
LREP Needle & Rosenberg, P.C.  
CLMN Number of Claims: 131  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 3871  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method for the comprehensive analysis of nucleic acid samples and a detector composition for use in the method. The method, referred to as Binary Encoded Sequence Tags (BEST), involves generation of a set of nucleic acid fragments; adding an adaptor to the ends containing recognition site for cleavage at a site offset from the recognition site; cleaving the fragment to generate fragments having a plurality sticky ends; indexing of the fragments into sets based on the sequence of sticky ends. The fragments are indexed by adding a offset adaptor to newly generated ends. A different adaptor will be coupled to each different sticky end. The resulting fragments--which will have defined ends, be of equal lengths (in preferred embodiment), and a central sequence derived from the source nucleic acid molecule--are binary sequence tags. The binary sequence tags can be used and further analyzed in numerous ways. For example, the binary sequence tags can be captured by hybridization and coupling, preferably by ligation, to a probe. The probe is preferably immobilized in an array or on sortable beads. One form of the BEST method, referred to as modification assisted analysis of binary sequence tags (MAABST), assesses modification of sequences in nucleic acid molecules by detecting differential cleavage based on the presence or absence of modification in the molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 19 OF 28 USPATFULL on STN  
AN 2002:85142 USPATFULL  
TI Multiplexed differential displacement for nucleic acid determinations  
IN Singh, Sharat, San Jose, CA, UNITED STATES  
Inamdar, Anita, Sunnyvale, CA, UNITED STATES  
Ullman, Edwin F., Atherton, CA, UNITED STATES  
Cao, Liching, Vallejo, CA, UNITED STATES  
Albagli, David, Millbrae, CA, UNITED STATES  
PA Lynx Therapeutics, Inc. (U.S. corporation)  
PI US 2002045182 A1 20020418  
AI US 2001-929333 A1 20010813 (9)  
RLI Division of Ser. No. US 2000-684590, filed on 5 Oct 2000, PENDING  
Continuation-in-part of Ser. No. US 2000-609279, filed on 30 Jun 2000,  
PENDING Continuation-in-part of Ser. No. US 1999-354629, filed on 16 Jul  
1999, PENDING  
DT Utility  
FS APPLICATION  
LREP PERKINS COIE LLP, P.O. BOX 2168, MENLO PARK, CA, 94026  
CLMN Number of Claims: 48  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 1497  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Multiplexed determinations of large numbers of events are achieved in an accurate and simple manner by using a multitude of primer reagents in combination with different capture reagents that serve for sequestering all the reagents at a single site, followed by independent release of subsets of the primer reagents using differential release conditions. Also included as part of the primer reagents may be identifiers, which

serve to identify a particular characteristic. The method is illustrated using primers with sequences for initiation of chain extension that are joined to or serve as a capture sequence, and where the extended primer has an identifier. After extending the primer, the extended primers are sequestered via the capture sequence onto a sequestering agent, sequentially released and the released extended primers analyzed to provide multiplexed determinations. The subject method finds application for nucleic acid sequencing, single nucleotide polymorphism determinations, identification of nucleic acid fragments, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 28 USPATFULL on STN  
AN 2002:78405 USPATFULL  
TI Compositions and methods for analysis of nucleic acids  
IN Makarov, Vladimir L., Ann Arbor, MI, UNITED STATES  
Langmore, John P., Ann Arbor, MI, UNITED STATES  
PA The Regents of the University of Michigan (U.S. corporation)  
PI US 2002042059 A1 20020411  
US 6762022 B2 20040713  
AI US 2001-801346 A1 20010306 (9)  
RLI Continuation of Ser. No. US 1998-151236, filed on 10 Sep 1998, GRANTED, Pat. No. US 6197557 Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-811804, filed on 6 Mar 1997, GRANTED, Pat. No. US 6117634  
DT Utility  
FS APPLICATION  
LREP David L. Parker, FULBRIGHT & JAWORSKI L.L.P., 600 Congress Avenue, Suite 2400, Austin, TX, 78701  
CLMN Number of Claims: 104  
ECL Exemplary Claim: 1  
DRWN 38 Drawing Page(s)  
LN.CNT 6552

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide primer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 21 OF 28 USPATFULL on STN  
AN 2001:112050 USPATFULL  
TI Fixed address analysis of sequence tags  
IN Lizardi, Paul M., Wallingford, CT, United States  
Roth, Matthew E., Branford, CT, United States  
Feng, Li, Hamden, CT, United States  
Guerra, Cesar E., Guilford, CT, United States  
Weber, Shane C., Woodbridge, CT, United States  
Kaufman, Joseph C., Hamden, CT, United States  
Latimer, Darin R., East Haven, CT, United States  
PA Yale University, New Haven, CT, United States (U.S. corporation)  
PI US 6261782 B1 20010717  
AI US 2000-544713 20000406 (9)  
PRAI US 1999-127932P 19990406 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Horlick, Kenneth R.  
LREP Needle & Rosenberg, P.C.



CLMN Number of Claims: 154  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 4505

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method for the comprehensive analysis of nucleic acid samples and a detector composition for use in the method. The method, referred to as Fixed Address Analysis of Sequence Tags (FAAST), involves generation of a set of nucleic acid fragments having a variety of sticky end sequences; indexing of the fragments into sets based on the sequence of sticky ends; associating a detector sequence with the fragments; sequence-based capture of the indexed fragments on a detector array; and detection of the fragment labels. Generation of the multiple sticky end sequences is accomplished by incubating the nucleic acid sample with one or more nucleic acid cleaving reagents. The indexed fragments are captured by hybridization and coupling, preferably by ligation, to a probe. The method allows a complex sample of nucleic acid to be quickly and easily cataloged in a reproducible and sequence-specific manner. One form of the method allows determination of associations, in a nucleic acid molecule, of different combinations of known or potential sequences. Another form of the method assesses modification of sequences in nucleic acid molecules by basing cleavage of the molecules on the presence or absence of modification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 22 OF 28 USPATFULL on STN  
AN 2001:33054 USPATFULL  
TI Compositions and methods for analysis of nucleic acids  
IN Makarov, Vladimir L., Ann Arbor, MI, United States  
Langmore, John P., Ann Arbor, MI, United States  
PA The Regents of the University of Michigan, Ann Arbor, MI, United States  
(U.S. corporation)  
PI US 6197557 B1 20010306  
AI US 1998-151236 19980910 (9)  
RLI Continuation-in-part of Ser. No. US 1998-35677, filed on 5 Mar 1998, now abandoned Continuation-in-part of Ser. No. US 1997-811804, filed on 6 Mar 1997, now patented, Pat. No. US 6117634  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Brusca, John S.; Assistant Examiner: Kim, Young  
LREP Fulbright & Jaworski, LLP  
CLMN Number of Claims: 46  
ECL Exemplary Claim: 1  
DRWN 67 Drawing Figure(s); 38 Drawing Page(s)  
LN.CNT 5768

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are a number of methods that can be used in a variety of embodiments, including, creation of a nucleic acid terminated at one or more selected bases, sequence analysis of nucleic acids, mapping of sequence motifs within a nucleic acid, positional mapping of nucleic acid clones, and analysis of telomeric regions. The methods utilize double-stranded templates, and in most aspects involve a strand replacement reaction initiated at one or more random or specific locations created in a nucleic acid molecule, and in certain aspects utilizing an oligonucleotide primer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 23 OF 28 USPATFULL on STN  
AN 2000:128125 USPATFULL  
TI Nucleic acid amplification using single primer  
IN Rose, Samuel, Mountain View, CA, United States  
Goodman, Thomas C., Mountain View, CA, United States

Western, Linda M., Mountain View, CA, United States  
Becker, Martin, Palo Alto, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S.  
corporation)  
PI US 6124090 20000926  
AI US 1995-438149 19950509 (8)  
RLI Division of Ser. No. US 1994-242931, filed on 16 May 1994 which is a  
continuation of Ser. No. US 1993-109852, filed on 20 Aug 1993, now  
abandoned which is a continuation of Ser. No. US 1991-734030, filed on  
22 Jul 1991, now abandoned which is a continuation of Ser. No. US  
1989-399795, filed on 29 Aug 1989, now abandoned which is a  
continuation-in-part of Ser. No. US 1989-299282, filed on 19 Jan 1989,  
now abandoned which is a division of Ser. No. US 1994-194140, filed on 9  
Feb 1994, now patented, Pat. No. US 5508178 which is a continuation of  
Ser. No. US 1992-892412, filed on 1 Jun 1992, now abandoned which is a  
continuation of Ser. No. US 1989-299282, filed on 19 Jan 1989, now  
abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Whisenant,  
Ethan  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 65  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 2173

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for determining the presence of a polynucleotide  
analyte in a sample suspected of containing the analyte. The method  
comprises (a) forming as a result of the presence of an analyte a single  
stranded polynucleotide comprising a target polynucleotide binding  
sequence flanked by first and second polynucleotide sequences that  
differ from the sequence of the analyte or a sequence complementary to  
the analyte sequence, (b) forming multiple copies of the single stranded  
polynucleotide, and (c) detecting the single stranded polynucleotide.  
Also disclosed is a method of producing at least one copy of a single  
stranded polynucleotide. The method comprises (a) forming in the  
presence of nucleoside triphosphates and template dependent  
polynucleotide polymerase an extension of a polynucleotide primer at  
least the 3'-end of which has at least a 10 base sequence hybridizable  
with a second sequence flanking the 3'-end of the single stranded  
polynucleotide, the second sequence being partially or fully  
complementary with at least a 10 base first sequence flanking the 5' end  
of the single stranded polynucleotide, (b) dissociating the extended  
polynucleotide primer and the single stranded polynucleotide, (c)  
repeating step a and (d) dissociating the extended polynucleotide primer  
and the copy of the single stranded polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 24 OF 28 USPATFULL on STN  
AN 1998:131529 USPATFULL  
TI Kits for nucleic acid amplification kit using single primer  
IN Rose, Samuel, Mountain View, CA, United States  
Goodman, Thomas C., Mountain View, CA, United States  
Western, Linda M., Mountain View, CA, United States  
Becker, Martin, Palo Alto, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Behring Diagnostics GmbH, Deerfield, IL, United States (U.S.  
corporation)  
PI US 5827649 19981027  
AI US 1994-242931 19940516 (8)  
RLI Continuation of Ser. No. US 1993-109852, filed on 20 Aug 1993, now

abandoned which is a continuation of Ser. No. US 1991-734030, filed on 22 Jul 1991, now abandoned which is a continuation of Ser. No. US 1989-399795, filed on 29 Aug 1989, now abandoned which is a continuation-in-part of Ser. No. US 1989-299282, filed on 19 Jan 1989, now abandoned

DT Utility  
FS Granted  
EXNAM Primary Examiner: Marschel, Ardin H.  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 5  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 1889

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for determining the presence of a polynucleotide analyte in a sample suspected of containing the analyte. The method comprises (a) forming as a result of the presence of an analyte a single stranded polynucleotide comprising a target polynucleotide binding sequence flanked by first and second polynucleotide sequences that differ from the sequence of the analyte or a sequence complementary to the analyte sequence, (b) forming multiple copies of the single stranded polynucleotide, and (c) detecting the single stranded polynucleotide. Also disclosed is a method of producing at least one copy of a single stranded polynucleotide. The method comprises (a) forming in the presence of nucleoside triphosphates and template dependent polynucleotide polymerase an extension of a polynucleotide primer at least the 3'-end of which has at least a 10 base sequence hybridizable with a second sequence flanking the 3'-end of the single stranded polynucleotide, the second sequence being partially or fully complementary with at least a 10 base first sequence flanking the 5' end of the single stranded polynucleotide, (b) dissociating the extended polynucleotide primer and the single stranded polynucleotide, (c) repeating step a and (d) dissociating the extended polynucleotide primer and the copy of the single stranded polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 25 OF 28 USPATFULL on STN  
AN 97:22643 USPATFULL  
TI Method for producing a polynucleotide for use in single primer amplification  
IN Western, Linda M., San Mateo, CA, United States  
Hahnenberger, Karen M., Cupertino, CA, United States  
Rose, Samuel, Mountain View, CA, United States  
Becker, Martin, Palo Alto, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)  
PI US 5612199 19970318  
AI US 1994-221662 19940401 (8)  
RLI Continuation of Ser. No. US 1991-776538, filed on 11 Oct 1991, now abandoned

DT Utility  
FS Granted  
EXNAM Primary Examiner: Zitomer, Stephanie W.  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 46  
ECL Exemplary Claim: 2  
DRWN 8 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 1936

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for extending an extender probe to produce a single stranded polydeoxynucleotide that is free of unreacted extender probe and has two segments that are non-contiguous and complementary

with each other. The method comprises the steps of (1) providing in combination (a) a polynucleotide having two non-contiguous, non-complementary nucleotide sequences S1 and S2 wherein S2 is 5' of S1 and is at least ten deoxynucleotides long, (b) an extender probe comprised of two deoxynucleotide sequences, wherein the sequence at the 3'-end of the extender probe (EP1) is hybridizable with S1 and the other of the deoxynucleotide sequences (EP2) is substantially identical to S2 and (c) means for modifying the 3'-end of extender probe that does not hybridize with the polynucleotide and (2) extending the extender probe along the polynucleotide wherein extender probe not hybridized to the polynucleotide becomes modified at its 3'-end.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 26 OF 28 USPATFULL on STN  
AN 97:5872 USPATFULL  
TI Method for producing a polynucleotide for use in single primer amplification  
IN Rose, Samuel, Mountain View, CA, United States  
Western, Linda M., Mountain View, CA, United States  
Becker, Martin, Palo Alto, CA, United States  
Ullman, Edwin F., Atherton, CA, United States  
PA Behringwerke AG, Marburg, Germany, Federal Republic of (non-U.S. corporation)  
PI US 5595891 19970121  
AI US 1990-555323 19900719 (7)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Zitomer, Stephanie W.  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 49  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 1793

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for producing a single stranded polydeoxynucleotide having two segments that are non-contiguous and complementary with each other. The method comprises the steps of providing in combination (1) a polynucleotide having two non-contiguous, non-complementary nucleotide sequences S1 and S2 wherein S2 is 5' of S1 and is at least ten deoxynucleotides long and (2) an extender probe comprised of two deoxynucleotide sequences, wherein the sequence at the 3'-end of the extender probe is hybridizable with S1 and the other of the deoxynucleotide sequences is homologous to S2 and (b) extending the extender probe along the polynucleotide. The method can also comprise providing in the combination a polydoxynucleotide primer capable of hybridizing at least at its 3'-end with a nucleotide sequence complementary to S2 under conditions where (1) the extended extender probe is rendered single stranded, (2) the polydeoxynucleotide primer hybridizes with and is extended along the extended extender probe to form a duplex comprising extended primer, (3) the extended primer is dissociated from the duplex, and (4) the primer hybridizes with and is extended along the extended primer to form a duplex comprising extended primer, and repeating steps (3) and (4). The method finds particular application in the detection of polynucleotide analytes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 27 OF 28 USPATFULL on STN  
AN 96:31728 USPATFULL  
TI Nucleic acid amplification using single primer  
IN Rose, Samuel, 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA, United States 94303  
Goodman, Thomas C., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA,



United States 94303  
Western, Linda M., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA,  
United States 94303  
Becker, Martin, 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA,  
United States 94303  
Ullman, Edwin F., 3401 Hillview Ave., P.O. Box 10850, Palo Alto, CA,  
United States 94303

PI US 5508178 19960416  
AI US 1994-194140 19940209 (8)  
RLI Continuation of Ser. No. US 1992-892412, filed on 1 Jun 1992, now  
abandoned which is a continuation of Ser. No. US 1989-299282, filed on  
19 Jan 1989, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Marschel, Ardin H.  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1860

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for determining the presence of a polynucleotide  
analyte in a sample suspected of containing the analyte. The method  
comprises (a) forming as a result of the presence of an analyte a single  
stranded polynucleotide comprising a target polynucleotide binding  
sequence flanked by first and second polynucleotide sequences that  
differ from the sequence of the analyte or a sequence complementary to  
the analyte sequence, (b) forming multiple copies of the single stranded  
polynucleotide, and (c) detecting the single stranded polynucleotide.  
Also disclosed is a method of producing at least one copy of a single  
stranded polynucleotide. The method comprises (a) forming in the  
presence of nucleoside triphosphates and template dependent  
polynucleotide polymerase an extension of a polynucleotide primer at  
least the 3'-end of which has at least a 10 base sequence hybridizable  
with a second sequence flanking the 3'-end of the single stranded  
polynucleotide, the second sequence being partially or fully  
complementary with at least a 10 base first sequence flanking the 5' end  
of the single stranded polynucleotide, (b) dissociating the extended  
polynucleotide primer and the single stranded polynucleotide, (c)  
repeating step a and (d) dissociating the extended polynucleotide primer  
and the copy of the single stranded polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 28 OF 28 USPATFULL on STN  
AN 95:71247 USPATFULL  
TI Method for producing a polynucleotide having an intramolecularly  
base-paired structure  
IN Rose, Samuel, Mountain View, CA, United States  
Western, Linda M., Mountain View, CA, United States  
PA Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)  
PI US 5439793 19950808  
AI US 1990-555968 19900719 (7)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Zitomer, Stephanie W.  
LREP Leitereg, Theodore J.  
CLMN Number of Claims: 49  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 2156

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is disclosed for forming a single stranded polynucleotide  
having two segments that are non-contiguous and hybridizable with each

other. The method comprises the step of providing in combination (1) a first polynucleotide sequence having a hydroxyl at its 3'-end, (2) a second polynucleotide sequence having a hydroxyl or phosphate group at its 5'-end, and (3) a ligase, wherein at least ten consecutive bases of one of the sequences can hybridize to the other of the sequences to form a duplex. The duplex is comprised of a non-hybridized single stranded portion of one of the polynucleotide sequences containing one of the ends and at least five bases. The combination is provided under conditions for forming the duplex and ligating the ends within the duplex. The method finds particular application in the detection of polynucleotide analytes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.